

IN THE CLAIMS:

Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as presented. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Previously Presented) A method for supporting wafers for singulation and pick-and-place, comprising:
providing a semiconductor wafer;
mounting an adhesive-coated tape to a surface of the semiconductor wafer;
gripping the semiconductor wafer along at least a portion of a periphery thereof;
singulating individual components from the semiconductor wafer, leaving a ring of material comprising at least in part a material of the semiconductor wafer along the periphery thereof; and
removing at least some individual components from the adhesive-coated tape.
2. (Previously Presented) The method of claim 1, wherein gripping the semiconductor wafer along at least a portion of the periphery thereof further includes gripping the semiconductor wafer by the ring of material during the removing of the at least some individual components.
3. (Previously Presented) The method of claim 1, further including forming the ring of material only from the material of the semiconductor wafer.

4. (Previously Presented) The method of claim 1, further including forming at least a portion of the ring of material from a polymer material disposed about and contiguous with a periphery of the semiconductor wafer and of thickness at least as great as a thickness of the semiconductor wafer.

5. (Previously Presented) The method of claim 1, further including forming the ring of material in part from the material of the semiconductor wafer and in part from a polymer disposed about and contiguous with a periphery of the semiconductor wafer and of thickness at least as great as a thickness of the semiconductor wafer.

6. (Original) The method of claim 5, further comprising forming the ring of material from the polymer material by one of spin-coating, stereolithography or molding.

7. (Original) The method of claim 1, further comprising backgrinding the semiconductor wafer prior to singulation.

8. (Original) The method of claim 7, further comprising mounting the adhesive-coated tape to an active surface of the semiconductor wafer and singulating the semiconductor wafer from a backside thereof after backgrinding.

9. (Original) The method of claim 7, further comprising mounting the adhesive-coated tape to a backside of the semiconductor wafer and singulating the semiconductor wafer from an active surface thereof.

10. (Original) The method of claim 1, further comprising mounting the adhesive-coated tape to a backside of the semiconductor wafer and singulating the semiconductor wafer from an active surface thereof.

11. (Original) The method of claim 1, wherein mounting the adhesive-coated tape comprises mounting a tape bearing a UV-sensitive adhesive thereon.

12. (Previously Presented) The method of claim 11, further comprising exposing the UV-sensitive adhesive prior to removing the at least some individual components while leaving a portion on the adhesive-coated tape extending over the ring of material unexposed.

13. (Original) The method of claim 1, wherein the semiconductor wafer is singulated using one of laser cutting, water cutting and sawing.

14. (Original) The method of claim 1, further comprising discarding the ring of material, any remaining individual components and the adhesive-coated tape after removing the at least some individual components.

15 - 24. (Canceled)

25. (Previously Presented) A method for processing a semiconductor wafer, comprising:
mounting an adhesive-coated tape to a surface of a semiconductor wafer; and
singulating individual components from the semiconductor wafer and removing at least some singulated individual components without using a film frame while the adhesive-coated tape is mounted to the surface thereof.

26. (Original) The method of claim 25, wherein the semiconductor wafer is a 300 mm semiconductor wafer and further including handling the 300 mm semiconductor wafer using equipment sized to handle 200 mm semiconductor wafers.

27. (Original) The method of claim 26, further including singulating the 300 mm semiconductor wafer using a 200 mm semiconductor wafer saw chuck.

28. (Original) The method of claim 26, further including holding the 300 mm semiconductor wafer in a 200 mm semiconductor wafer pick-and-place machine chuck while removing the at least some singulated individual components therefrom.

29. (Previously Presented) A method of processing a semiconductor wafer, comprising:
gripping a semiconductor wafer along at least a portion of a periphery thereof; and
singulating individual components from the semiconductor wafer while leaving an uncut peripheral ring of material comprising at least in part a material of the semiconductor wafer thereabout.

30. (Original) The method of claim 29, further including removing at least some singulated individual components therefrom.

31. (Previously Presented) The method of claim 30, wherein gripping a semiconductor wafer along at least a portion of a periphery thereof further includes gripping the uncut peripheral ring of material while removing the at least some singulated individual components therefrom.

32. (Original) The method of claim 29, further comprising defining the uncut peripheral ring of material from semiconductor material.

33. (Previously Presented) The method of claim 29, further comprising defining the uncut peripheral ring of material at least in part from a polymer disposed about and contiguous with the semiconductor wafer.

34. (Previously Presented) The method of claim 29, further comprising defining the uncut peripheral ring of material in part from semiconductor material and in part from a polymer disposed about and contiguous with a periphery of the semiconductor wafer.

35. (Original) The method of claim 30, wherein the semiconductor wafer is a 300 mm semiconductor wafer and further including handling the 300 mm semiconductor wafer using equipment sized to handle 200 mm semiconductor wafers.

36. (Original) The method of claim 35, further including singulating the 300 mm semiconductor wafer using a 200 mm semiconductor wafer saw chuck.

37. (Original) The method of claim 35, further including holding the 300 mm semiconductor wafer in a 200 mm semiconductor wafer pick-and-place machine chuck while removing the at least some singulated individual components therefrom.

38. (Original) A method of using a 300 mm semiconductor wafer, including handling the 300 mm semiconductor wafer with equipment sized to handle 200 mm semiconductor wafers.

39. (Original) The method of claim 38, further including processing the 300 mm semiconductor wafer with equipment sized to handle 200 mm semiconductor wafers.

40 - 41. (Canceled)